

Title (en)
PREVIOUS LAYER SELF-ALIGNED VIA AND PLUG PATTERNING FOR BACK END OF LINE (BEOL) INTERCONNECTS

Title (de)
SUBTRAKTIVE SELBSTJUSTIERENDE DURCHFÜHRUNG UND STECKERSTRUKTURIERUNG FÜR BEOL-VERBINDUNGEN

Title (fr)
AGENCEMENT DE TRAVERSÉES ET DE BOUCHONS AUTO-ALIGNÉS SUR LA COUCHE PRÉCÉDENTE POUR INTERCONNEXIONS DE FABRICATION FINALE (BEOL)

Publication
EP 3050086 A1 20160803 (EN)

Application
EP 13894291 A 20130927

Priority
US 2013062327 W 20130927

Abstract (en)
[origin: WO2015047321A1] Previous layer self-aligned via and plug patterning for back end of line (BEOL) interconnects are described. In an example, an interconnect structure for an integrated circuit includes a first layer disposed above a substrate. The first layer of the interconnect structure includes a grating of alternating metal lines and dielectric lines in a first direction. A second layer of the interconnect structure is disposed above the first layer. The second layer includes a grating of alternating metal lines and dielectric lines in a second direction, perpendicular to the first direction. Each metal line of the grating of the second layer is disposed on a recessed dielectric line composed of alternating distinct regions of a first dielectric material and a second dielectric material corresponding to the alternating metal lines and dielectric lines of the first layer of the interconnect structure.

IPC 8 full level
H01L 21/768 (2006.01); **H01L 23/528** (2006.01)

CPC (source: EP KR US)
H01L 21/76801 (2013.01 - EP US); **H01L 21/76802** (2013.01 - US); **H01L 21/76807** (2013.01 - EP KR US); **H01L 21/76816** (2013.01 - EP KR US); **H01L 21/76829** (2013.01 - US); **H01L 21/76835** (2013.01 - KR); **H01L 21/76838** (2013.01 - KR); **H01L 21/7685** (2013.01 - KR); **H01L 21/76883** (2013.01 - US); **H01L 21/76897** (2013.01 - EP KR US); **H01L 23/5226** (2013.01 - US); **H01L 23/528** (2013.01 - EP KR US); **H01L 23/5329** (2013.01 - US); **H01L 2924/0002** (2013.01 - EP US)

Designated contracting state (EPC)
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